

Title (en)
PRECISION CLEAVING OF OPTICAL FIBERS.

Title (de)
PRÄZISIONSSPALTEN OPTISCHER FASERN.

Title (fr)
CLIVAGE DE PRECISION DE FIBRES OPTIQUES.

Publication
EP 0105909 A4 19840820 (EN)

Application
EP 83901529 A 19830330

Priority
US 37036982 A 19820421

Abstract (en)
[origin: WO8303822A1] Optical fibers are cleaved with high precision by a technique that yields flat endfaces that are perpendicular to the axis of the fiber within 1 degree, and typically within 0.5 degree. This is very advantageous for obtaining low loss splices of fibers, especially single mode fibers. In the present technique, a fiber (101) is secured in two linearly aligned chucks (102, 108) in a sequence that allows one end to rotate unconstrained to minimize torsion. An axial tension is then applied in the fiber, which is next scored. The fiber then typically breaks, but cleaving can be promoted by applying further tension, or introducing moisture, if necessary.

IPC 1-7
C03B 37/16

IPC 8 full level
G02B 6/25 (2006.01)

CPC (source: EP US)
G02B 6/25 (2013.01 - EP US); **Y10T 29/49195** (2015.01 - EP US); **Y10T 225/12** (2015.04 - EP US); **Y10T 225/325** (2015.04 - EP US);
Y10T 225/357 (2015.04 - EP US)

Citation (search report)
• [E] FR 2492363 A1 19820423 - LIGNES TELEGRAPH TELEPHON [FR]
• [X] GB 2052790 A 19810128 - GEN ELECTRIC

Designated contracting state (EPC)
CH DE FR LI NL SE

DOCDB simple family (publication)
GB 2118539 A 19831102; GB 2118539 B 19860108; GB 8310199 D0 19830518; CA 1207138 A 19860708; DE 3367761 D1 19870108;
EP 0105909 A1 19840425; EP 0105909 A4 19840820; EP 0105909 B1 19861120; US 4473942 A 19841002; WO 8303822 A1 19831110

DOCDB simple family (application)
GB 8310199 A 19830415; CA 425009 A 19830331; DE 3367761 T 19830330; EP 83901529 A 19830330; US 37036982 A 19820421;
US 8300449 W 19830330